Nitrogen (Ammonia or TKN) by Titrimetric, Following Distillation SM 19th/20th/21st Ed. 4500-NH3 B+C	Page 1 of 1

Facility Name:_____VELAP ID_____

Assessor Name:_____ Analyst Name:_____ Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
Are all samples distilled prior to titration? *40CFR136 allows distillation by EPA 350.1 Rev. 2.0, SM18, 19, 20, 21Ed. 4500-NH3B, SM online 4500-NH3B-97, and AOAC 973.49.*	4500-NH$_3$ C.1				
Distillation: Is 500-mL dechlorinated sample or for < 100 mg/L 1000-mL sample used?	4500-NH$_3$ B 4.b				
Is 25-mL Boric Acid added and pH adjusted to 9.5 with 6N NaOH using a pH meter?	4500-NH$_3$ B 4.b				
Is distillation rate 6 to 10 mL/min with tip of the delivery tube below the surface of 50-mL boric acid solution?	4500-NH$_3$ B 4.c				
Is at least 200-mL collected and then diluted to 500-mL?	4500-NH$_3$ B 4.c				
Titration: Is ammonia-free water used in making all reagents and dilutions?	4500-NH$_3$ C.3				
Are mixed indicator solution and indicating boric acid solution prepared at least monthly?	4500-NH$_3$ C.3				
Is sample determined as: 5-10 mg/L level use 250 mL; 10-20 mg/L use 100 mL; 20-50 mg/L use 50.0 mL; 50-100 mg/L use 25.0 mL	4500-NH$_3$ C.1				
Is 0.02N H$_2$SO$_4$ titrant standardized to 0.0200N per SM19th Ed. 2320B.3c, or is 0.0200N titrant purchased? If standardizing, use the amount of Na2CO3 that has been incorporated into the indicating boric acid solution.	4500-NH$_3$ C.3.c				
For sludge or sediment samples, is wet portion weighed and distilled, collecting 100 mL distillate for titration? The amount weighed is equivalent to approximately 1 g dry weight.	4500-NH$_3$ C.4.b				
Are samples titrated with 0.02N H$_2$SO$_4$ titrant until indicator turns pale lavender?	4500-NH$_3$ C.4.c				
Is a blank carried through all steps of the procedure, and is the necessary correction applied to the results?	4500-NH$_3$ C.4.d				
Notes/Comments:					